

**FACT SHEET FOR STATE WASTE DISCHARGE
PERMIT NO. ST-9236**

Goldendale Energy Center, LLC

SUMMARY

The Goldendale Energy Center produces electrical energy. The facility was constructed in 2003. In March 2004 the Permittee reported the plant was in the pre-startup process. The plant became fully operational in September 2004.

The project consists of one 248 megawatt gas fired combined-cycle turbine system. The combined-cycle turbine system consists of one combustion gas turbine-driven generator and one steam turbine-driven generator, including a duct burner. The exhaust heat from the combustion turbine flows to a heat recovery steam generator (HRSG) to produce steam. Steam from the HRGS then flows to the steam turbine, producing electric energy.

There are five wastewater streams sent to the main wastewater collection point manifold that flows to the City of Goldendale POTW. Four streams are process wastewater and three of those are treated prior to discharge to the collection header. The fourth stream is a small non-oily water stream from miscellaneous plant drains. The fifth stream is domestic wastewater and is not treated prior to discharge. The city has the option to divert flow to either a near by stabilization pond or accept the combined wastestream directly to the POTW.

The facility is permitted under two sets of limitations. One is the existing Federal categorical limitations, under 40 CFR Part 423.17 New Source Steam Electric Power Generating Point Source Pre-treatment Standards, which limits 126 priority pollutants. The second contains the local limitations established under the City of Goldendale's sewer use ordinance limit flow, temperature and pH.

Monitoring for flow, temperature and pH under the local agreement is continuous. Oil and grease, although not limited, will be monitored monthly. The priority pollutants and copper monitoring will be required on an annual basis. The Permittee is required to submit Discharge Monitoring Reports (DMRs) on a monthly basis to the Department.

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INTRODUCTION

This fact sheet is a companion document to the draft State Waste Discharge Permit No. ST-9236. The Department of Ecology (the Department) is proposing to issue this permit, which will allow discharge of wastewater to the Goldendale POTW. This fact sheet explains the nature of the proposed discharge, the Department's decisions on limiting the pollutants in the wastewater, and the regulatory and technical bases for those decisions.

Washington State law (RCW 90.48.080 and 90.48.160) requires that a permit be issued before discharge of wastewater to waters of the State is allowed. This statute includes commercial or industrial discharges to sewerage systems operated by municipalities or public entities which discharge into public waters of the State. Regulations adopted by the State include procedures for issuing permits and establish requirements which are to be included in the permit (Chapter 173-216 WAC).

This fact sheet and draft permit are available for review by interested persons as described in Appendix A--Public Involvement Information.

The fact sheet and draft permit have been reviewed by the Permittee. Errors and omissions identified in these reviews have been corrected before going to public notice. After the public comment period has closed, the Department will summarize the substantive comments and the response to each comment. The summary and response to comments will become part of the file on the permit and parties submitting comments will receive a copy of the Department's response. The fact sheet will not be revised. Changes to the permit will be addressed in Appendix C -- Response to Comments.

GENERAL INFORMATION	
Applicant	Goldendale Energy Center, LLC
Facility Name and Address	Goldendale Energy Center, LLC 600 Industrial Way Goldendale, WA 98620
Type of Facility:	Gas and Steam Electric Power Generation
Facility Discharge Location	Latitude: 45° 48' 45" W. Longitude: 120° 49' 52" N
Treatment Plant Receiving Discharge	Goldendale POTW
Contact at Facility	Name: Rich Downen Alternate: Wayne Milke Telephone #: 509 773-1202 Telephone #: 509 773-1209
Responsible Official	Name: Mike Rogers Title: Vice President Operations Address: 600 Industrial Way Telephone #: 509 773-1203 FAX # 509 773-1200

BACKGROUND INFORMATION

DESCRIPTION OF THE FACILITY

History

The Goldendale Energy Center consists of a 248 megawatt gas fired combined-cycle turbine system. The facility was constructed in 2003. In March 2004 the Permittee reported the plant was in the pre-startup process. The plant became fully operational in September 2004.

Production Processes

The Goldendale Energy Center produces electrical energy. The project consists of one combustion gas turbine driven generator and one steam turbine driven generator, including a duct burner. The exhaust heat from the combustion turbine flows to a heat recovery steam generator (HRSG) to produce steam. Steam from the HRSGs then flows to the steam turbine, producing electric energy. The steam exhausted by the steam turbine flows to the combination water and air-cooled condenser system where it is condensed and returned to the HRSG.

Treatment Processes

There are five wastewater streams sent to the main wastewater collection header that flows to the City of Goldendale POTW. Four streams are process wastewater and three of those are either pH

neutralized, chilled or oil/water separated prior to discharge to the collection header. The forth stream is a small non-oily water stream from miscellaneous plant drains. The fifth stream is domestic wastewater which is not treated prior to discharge.

Water used in the plant undergoes an ion exchange process using anionic and cationic resin beds that generate the desilicized water or service water. The desilicized water is primarily used for cooling tower make-up water. The desilicized water is further treated through a mixed anion and cation bed and stored as demineralized water. The demineralized water is make-up water for the heat recovery steam generator (HRSG).

Table 1: Process Water Quantity

Process Water Uses	Estimated Average Flow gpm	Estimated Peak Flow gpm
Cooling Tower Make-up	310	895
Heat Recovery Generator (HRSG)	24	29
Miscellaneous Plant Services	41	117
Total Water Demand	375	1,041

Cooling Tower Blow Down

The cooling water loop is controlled within a pH range of 6.5 to 8.5 as a process control parameter monitored by the automated distributed control system, (DCS). The discharge temperature limit is 80° C and the temperature of the blowdown would, without further treatment, exceed this value during the summer months. The facility has a chiller online that cools the effluent prior to discharge to the POTW. This process is alarmed and controlled through the DCS. In addition to the chilled effluent stream, the city has the option to either divert flow to a nearby stabilization pond or accept the wastestream directly to the POTW.

Demineralizer Waste

The demineralization equipment requires the use of acids and caustics in the regeneration process. Wastewaters are either acidic or alkaline depending on the resin type regenerated. The regeneration and rinse streams flow to the neutralization tank where the pH is corrected. A pump recirculates the tank volume with acid or base added to maintain the pH in the range of 6.5 to 8.5. The pH is monitored by the DCS and is pH stabilized prior to discharge of any excess caused by the addition of rinse water.

Oily Water

Plant water sources that are potentially contaminated with oil are collected and flow to the oil/water separator, (OWS). The clean water from the separator is discharged to the plant sump.

The oil is skimmed to a separate oil storage tank with a level monitor linked to the DCS with appropriate alarm points to allow for oil removal.

The oil water separator is an industry standard 150 gpm capacity coalescing plate type separator with a separate oil storage tank. The design flow is typically 5 -10 gpm. Flows are small with a typical 1 gpm peak. The oversized unit has not presented any operational or compliance problems.

Non-oily Water

The non-oily wastewater from the Heat Recovery Steam Generator/Steam Cycle area meets the discharge criteria for temperature, pH and oil and grease using the processes described previously.

Sanitary Wastewater

Sanitary wastewater from the various site buildings also discharge into the effluent flow. The system is equipped with various drains from the lavatories, urinals, water closets and building floor drains. This wastestream is not covered under this permit.

Stormwater

Calpine holds stormwater permit # S03-004405-B. They maintain 2 settling ponds plumbed in series that are approximately 100 feet in diameter.

OUTFALL

A series of sumps collect wastewater from the various locations within the plant. All wastestreams including sanitary waste are combined prior to discharge to the City. Once the discharge has left the facility the City has the option of either sending the discharge directly to the POTW or diverting the discharge to a retention pond.

Table 2: Process Wastewater Summary
Relative Contribution of Individual Waste Streams to the Discharge

Waste Stream	Estimated Average Day	Estimated Peak
Cooling Tower Blow Down	21 gpm / 58%	60 gpm / 64%
Demineralized Waste	10 gpm / 28%	28 gpm / 30%
Oily water Waste	1 gpm / 3%	1 gpm / 1%
Non-oily Waste	3 gpm / 8%	3 gpm / 4%
Sanitary Waste	1gpm / 3%	1 gpm / 1%
Total	36 gpm / 100%	93 gpm / 100%

PERMIT STATUS

This is a new facility. An application for a permit was received by the Department on October 29, 2003 and accepted by the Department on December 19, 2003. A temporary permit was issued to the Permittee on February 2, 2004. At start-up in July 2004 the Goldendale POTW experienced an upset due to rusty water discharged from the Permittee. This caused a failure of the UV disinfection process and oxygen depletion in the aeration basin.

WASTEWATER CHARACTERIZATION

The combined wastewater discharge is characterized in Table 3 for the following parameters taken from samples submitted for analysis on July 14, 2005:

Table 3: Combined Wastewater Characterization

Parameter	Average		Parameter	Average
BOD ₅	ND*		Potassium	17.4 mg/L
COD	36.7 mg/L		Sodium	120 mg/L
TSS	5 mg/L		Sulfate	225 mg/l
TDS	760 mg/L		Arsenic	1.57 µg/L
Conductivity	890 µS/cm		Barium	22.8 µg/L
pH std. units	6.95		Cadmium	ND
Total Phosphate	6.92 mg/L		Chromium	3.13 µg/L
Ortho-phosphate-P	5.28 mg/L		Copper	1.82 µg/L
Total Hydrocarbons	ND		Lead	ND
Total Oil and Grease	ND		Mercury	ND
Pesticides & PCB	ND		Molybdenum	59.7 µg/L
Purgeables	ND		Nickel	2.81 µg/L
Acid/Base Extractables	ND		Selenium	ND
Calcium	29.8 mg/L		Silver	ND
Magnesium	12.4 mg/L		Zinc	164 µg/L
Selenium	ND		Antimony	27.3 µg/L
Beryllium	ND		Thallium	ND
Fluoride	560 µg/L		Cyanide	ND
Magnesium	12.4 mg/L			

*ND Not Detected

SEPA COMPLIANCE

The Goldendale Energy Center is in compliance with the State Environmental Policy Act (SEPA). A Mitigated Determination of Non-Significance (MDNS) for the project was issued by

the City of Goldendale on October 26, 2000. Mitigation in the form of construction BMP's, wetland setback, light and glare and landscaping issues did not affect the contract between the Permittee and the City. The Permittee was required to fund the acquisition of additional water rights for the City to meet the water needs of the facility.

PROPOSED PERMIT LIMITATIONS

State regulations require that limitations set forth in a waste discharge permit must be based on the technology available to treat the pollutants (technology-based) or be based on the effects of the pollutants to the POTW (local limits). Wastewater must be treated using all known, available, and reasonable methods of prevention, control and treatment (AKART) and not interfere with the operation of the POTW.

The minimum requirements to demonstrate compliance with the AKART standard and specific design criteria for this facility were determined in the engineering report Goldendale Energy Center, LLC., Engineering Report: Industrial Wastewater Facility prepared by Maul Foster & Alongi, Inc. The report was received by the Department on December 9, 2003 and was approved on December 17, 2003.

The more stringent of the local limits-based or technology-based limits are applied to each of the parameters of concern. Each of these types of limits is described in more detail below.

TECHNOLOGY-BASED EFFLUENT LIMITATIONS

All waste discharge permits issued by the Department must specify conditions requiring AKART of discharges to waters of the State (WAC 173-216-110). Existing Federal categorical limitations for this facility are found under 40 CFR Part 423.17 New Source Steam Electric Power Generating Point Source, Pre-treatment Standards. In addition the discharge must be in compliance with 40 CFR 403 which prohibits discharges that may cause upset at the POTW.

Table 4 contains the 40 CFR Part 423.17 New Source Pretreatment Standards applicable to the Permittee's facility. Fly ash transport water and poly-chlorinated bi-phenyls (PCB) from transformer oil are listed in the categorical limits but they are not an issue with the discharge at this facility. A gas fired power plant does not generate fly ash. All transformers are located away from the plant proper and in addition they do not contain PCB in the transformer oil.

Table 4: 40 CFR 423.17 Limitations Applicable to the Electrical Generating Facility

Parameter	New Source Pretreatment Standards
Metal Cleaning Waste	
Copper	1mg/L
Cooling Tower Blowdown	
Chromium	0.2 mg/L
Zinc	1 mg/L

The cooling water loop is controlled to a pH range of 6.5 to 8.5 as process control parameter monitored by the automated distributed control system, (DCS). Chromium and zinc are not expected to be in cooling tower blowdown for two reasons. First, the process water is ion exchanged and second, the cooling water treatment compounds do not contain these metals. 40 CFR 423.17(b) stipulates a pretreatment standard for chemical cleaning wastes of 1.0 mg/L for copper. All such wastes at the facility are collected, evaporated and hauled off-site by a licensed hazardous waste company.

EFFLUENT LIMITATIONS BASED ON LOCAL LIMITS

In order to protect the Goldendale POTW from pass-through, interference, concentrations of toxic chemicals that would impair beneficial or designated uses of sludge, or potentially hazardous exposure levels, limitations for certain parameters are necessary. These limitations are based on local limits established by Goldendale POTW and codified in ordinance. The pH limitations were established in the Sewer Use Ordinance. Furthermore through agreement between the City of Goldendale and the Permittee, where pH is continuously monitored a spike in pH to a value of 10.0 for duration of one hour less will not constitute a violation of the pH limitation.

The demineralization equipment requires the use of acids and caustics in the regeneration process. Wastewaters are either acidic or alkaline depending on the resin type regenerated. The regeneration and rinse streams flow to the neutralization tank where the pH is corrected. The neutralization tank is a 30,000 gallon tank that receives the rinse and regeneration waste streams. The regeneration process is a batch process with storage capacity roughly equivalent to the daily regeneration volume. A pump recirculates the tank volume with acid or base added to maintain the pH in the range of 6.5 - 8.5. The pH is monitored by the DCS with pH stabilization prior to discharge of any excess caused by the addition of rinse water.

The other limits applied to this discharge are flow and temperature which were established by contractual agreement between the City and Permittee. Table 5 includes the following local limitations.

Table 5: Local Limitations

Parameter	Limit
Flow	0.150 MGD ¹
Temperature	26.7 ° C
pH	5.5 – 9.0 std. units ²

¹ By contract the Permittee may discharge up to 200 gpm for up to 4 hours. At all other times the Permittee is limited to 93 gpm.

² Indicates the range of permitted values. As per agreement between the City of Goldendale and the Permittee, where pH is continuously monitored a spike in pH to 10.0 for a duration of one hour or less will not constitute a violation of the pH limitation.

MONITORING REQUIREMENTS

Monitoring, recording, and reporting are specified to verify that the treatment process is functioning correctly, and that effluent limitations are being achieved (WAC 173-216-110).

The monitoring schedule is detailed in the proposed permit under Special Condition S2. Specified monitoring frequencies take into account the quantity and variability of the discharge, the treatment method, past compliance, significance of pollutants, and cost of monitoring.

Flow, Temperature and pH are monitored at the outfall. Temperature and pH are monitored with in situ probes and flow is monitored at an in-pipe weir equipped with an electronic eye sensor telemetry. Oil and grease will be monitored via grab samples taken at the outfall inspection manhole on a monthly basis as per the City's request. The priority pollutants, including zinc, chromium and copper, will be monitored annually and the main collection point prior to discharge to the City's collection system.

OTHER PERMIT CONDITIONS

REPORTING AND RECORDKEEPING

The provisions of Special Condition S3 are based on the authority to specify any appropriate reporting and recordkeeping requirements to prevent and control waste discharges (WAC 173-216-110 and 40 CFR 403.12 (e),(g), and (h)).

OPERATIONS AND MAINTENANCE (O&M)

The proposed permit contains Special Condition S5. as authorized under Chapter 173-240-150 WAC and Chapter 173-216-110 WAC. It is included to ensure proper operation and regular

maintenance of equipment, and to ensure that adequate safeguards are taken so that constructed facilities are used to their optimum potential in terms of pollutant capture and treatment. The proposed permit requires submission of an O&M manual for the entire pretreatment wastewater system. The Permittee is required to review the O&M Manual annually and submit updates as necessary.

SPILL AND SLUG DISCHARGE PREVENTION AND CONTROL PLAN

The Department has determined that the Permittee stores a quantity of chemicals that have the potential to cause water pollution if accidentally released. The Department has the authority to require the Permittee to develop best management plans to prevent this accidental release under section 402(a)(1) of the Federal Water Pollution Control Act (FWPCA), 40 CFR 112 and RCW 90.48.080.

The Permittee maintains a supply of caustic and acid in order to regenerate the ion exchange resins that are part of the Permittee's intake water pretreatment process. These chemicals could cause upset at the POTW and therefore, the Permittee is required to develop a Spill and Slug Discharge, Prevention and Control Plan for preventing the accidental release of pollutants to State waters and for minimizing damages if such a spill occurs. The proposed permit requires the Permittee to annually review and update as necessary this plan and submit all updates to the Department.

PROHIBITED DISCHARGES

Certain pollutants are prohibited from being discharged to the POTW. These include substances which cause pass-through or interference, pollutants which may cause damage to the POTW or harm to the POTW workers (Chapter 173-216 WAC) and the discharge of designated dangerous wastes not authorized by this permit (Chapter 173-303 WAC).

DILUTION PROHIBITED

The Permittee is prohibited from diluting its effluent as a partial or complete substitute for adequate treatment to achieve compliance with permit limitations.

GENERAL CONDITIONS

General Conditions are based directly on State laws and regulations and have been standardized for all industrial waste discharge to POTW permits issued by the Department.

Condition G1. requires responsible officials or their designated representatives to sign submittals to the Department. Condition G2. requires the Permittee to allow the Department to access the treatment system, production facility, and records related to the permit. Condition G3. specifies conditions for modifying, suspending or terminating the permit. Condition G4. requires the

Permittee to apply to the Department prior to increasing or varying the discharge from the levels stated in the permit application. Condition G5. requires the Permittee to construct, modify, and operate the permitted facility in accordance with approved engineering documents. Condition G6. prohibits the Permittee from using the permit as a basis for violating any laws, statutes or regulations. Conditions G7. and G8. relate to permit renewal and transfer. Condition G9. requires the Permittee to control production or wastewater discharge in order to maintain compliance with the permit. Condition G10 prohibits the reintroduction of removed pollutants into the effluent stream for discharge. Condition G11. requires the payment of permit fees. Condition G12. describes the penalties for violating permit conditions.

PUBLIC NOTIFICATION OF NONCOMPLIANCE

A list of all industrial users which were in significant noncompliance with Pretreatment Standards or Requirements during any of the previous four quarters may be annually published by the Department in a local newspaper. Accordingly, the Permittee is apprised that noncompliance with this permit may result in publication of the noncompliance.

RECOMMENDATION FOR PERMIT ISSUANCE

This proposed permit meets all statutory requirements for authorizing a wastewater discharge, including those limitations and conditions believed necessary to control toxics. The Department proposes that the permit be issued for 5 years.

REFERENCES FOR TEXT AND APPENDICES

Washington State Department of Ecology.

Laws and Regulations(<http://www.ecy.wa.gov/laws-rules/index.html>)

Permit and Wastewater Related Information
(<http://www.ecy.wa.gov/programs/wq/wastewater/index.html>)

APPENDIX A--PUBLIC INVOLVEMENT INFORMATION

The Department has tentatively determined to issue a permit to the applicant listed on page 1 of this fact sheet. The permit contains conditions and effluent limitations which are described in the rest of this fact sheet.

Public notice of application was published on January 1, and January 8, 2004 in the Goldendale Sentinel to inform the public that an application had been submitted and to invite comment on the issuance of this permit.

The Department will publish a Public Notice of Draft (PNOD) on October 27, 2005 in the Goldendale Sentinel to inform the public that a draft permit and fact sheet are available for review. Interested persons are invited to submit written comments regarding the draft permit. The draft permit, fact sheet, and related documents are available for inspection and copying between the hours of 8:00 a.m. and 5:00 p.m. weekdays, by appointment, at the regional office listed below. Written comments should be mailed to:

Water Quality Permit Coordinator
Department of Ecology
Central Regional Office
15 West Yakima Avenue, Suite 200
Yakima, WA 98902

Any interested party may comment on the draft permit or request a public hearing on this draft permit within the 30 day comment period to the address above. The request for a hearing shall indicate the interest of the party and reasons why the hearing is warranted. The Department will hold a hearing if it determines there is a significant public interest in the draft permit (WAC 173-216-100). Public notice regarding any hearing will be circulated at least 30 days in advance of the hearing. People expressing an interest in this permit will be mailed an individual notice of hearing.

Comments should reference specific text followed by proposed modification or concern when possible. Comments may address technical issues, accuracy and completeness of information, the scope of the facility's proposed coverage, adequacy of environmental protection, permit conditions, or any other concern that would result from issuance of this permit.

The Department will consider all comments received within 30 days from the date of public notice of draft indicated above, in formulating a final determination to issue, revise, or deny the permit. The Department's response to all significant comments is available upon request and will be mailed directly to people expressing an interest in this permit.

Further information may be obtained from the Department by telephone, 509/457-7105, or by writing to the address listed above.

This permit was written by Richard Marcle.

APPENDIX B--GLOSSARY

Ammonia—Ammonia is produced by the breakdown of nitrogenous materials in wastewater. Ammonia is toxic to aquatic organisms, exerts an oxygen demand, and contributes to eutrophication. It also increases the amount of chlorine needed to disinfect wastewater.

Average Monthly Discharge Limitation—The average of the measured values obtained over a calendar month's time.

Best Management Practices (BMPs)--Schedules of activities, prohibitions of practices, maintenance procedures, and other physical, structural and/or managerial practices to prevent or reduce the pollution of waters of the State. BMPs include treatment systems, operating procedures, and practices to control: plant site runoff, spillage or leaks, sludge or waste disposal, or drainage from raw material storage. BMPs may be further categorized as operational, source control, erosion and sediment control, and treatment BMPs.

BOD₅--Determining the Biochemical Oxygen Demand of an effluent is an indirect way of measuring the quantity of organic material present in an effluent that is utilized by bacteria. The BOD₅ is used in modeling to measure the reduction of dissolved oxygen in a receiving water after effluent is discharged. Stress caused by reduced dissolved oxygen levels makes organisms less competitive and less able to sustain their species in the aquatic environment. Although BOD is not a specific compound, it is defined as a conventional pollutant under the Federal Clean Water Act.

Bypass—The intentional diversion of waste streams from any portion of the collection or treatment facility.

Categorical Pretreatment Standards—National pretreatment standards specifying quantities or concentrations of pollutants or pollutant properties which may be discharged to a POTW by existing or new industrial users in specific industrial subcategories.

Compliance Inspection - Without Sampling--A site visit for the purpose of determining the compliance of a facility with the terms and conditions of its permit or with applicable statutes and regulations.

Compliance Inspection - With Sampling--A site visit to accomplish the purpose of a Compliance Inspection - Without Sampling and as a minimum, sampling and analysis for all parameters with limits in the permit to ascertain compliance with those limits; and, for municipal facilities, sampling of influent to ascertain compliance with the 85 percent removal requirement. Additional sampling may be conducted.

Composite Sample—A mixture of grab samples collected at the same sampling point at different times, formed either by continuous sampling or by mixing discrete samples. May be “time-composite”(collected at constant time intervals) or “flow-proportional” (collected either as a constant sample volume at time intervals proportional to stream flow, or collected by increasing the volume of each aliquot as the flow increased while maintaining a constant time interval between the aliquots).

Construction Activity—Clearing, grading, excavation and any other activity which disturbs the surface of the land. Such activities may include road building, construction of residential houses, office buildings, or industrial buildings, and demolition activity.

Continuous Monitoring –Uninterrupted, unless otherwise noted in the permit.

Engineering Report—A document, signed by a professional licensed engineer, which thoroughly examines the engineering and administrative aspects of a particular domestic or industrial wastewater facility. The report shall contain the appropriate information required in WAC 173-240-060 or 173-240-130.

Grab Sample—A single sample or measurement taken at a specific time or over as short period of time as is feasible.

Industrial User—A discharger of wastewater to the sanitary sewer which is not sanitary wastewater or is not equivalent to sanitary wastewater in character.

Industrial Wastewater—Water or liquid-carried waste from industrial or commercial processes, as distinct from domestic wastewater. These wastes may result from any process or activity of industry, manufacture, trade or business, from the development of any natural resource, or from animal operations such as feed lots, poultry houses, or dairies. The term includes contaminated storm water and, also, leachate from solid waste facilities.

Interference— A discharge which, alone or in conjunction with a discharge or discharges from other sources, both:

Inhibits or disrupts the POTW, its treatment processes or operations, or its sludge processes, use or disposal and;

Therefore is a cause of a violation of any requirement of the POTW's NPDES permit (including an increase in the magnitude or duration of a violation) or of the prevention of sewage sludge use or disposal in compliance with the following statutory provisions and regulations or permits issued thereunder (or more stringent State or local regulations): Section 405 of the Clean Water Act, the Solid Waste Disposal Act (SWDA) (including title II, more commonly referred to as the Resource Conservation and Recovery Act (RCRA), and including State regulations contained in any State sludge management plan prepared pursuant to subtitle D of the SWDA), sludge

regulations appearing in 40 CFR Part 507, the Clean Air Act, the Toxic Substances Control Act, and the Marine Protection, Research and Sanctuaries Act.

Local Limits—Specific prohibitions or limits on pollutants or pollutant parameters developed by a POTW.

Maximum Daily Discharge Limitation—The highest allowable daily discharge of a pollutant measured during a calendar day or any 24-hour period that reasonably represents the calendar day for purposes of sampling.

Method Detection Level (MDL)--The minimum concentration of a substance that can be measured and reported with 99% confidence that the analyte concentration is above zero and is determined from analysis of a sample in a given matrix containing the analyte.

Pass-through— A discharge which exits the POTW into waters of the State in quantities or concentrations which, alone or in conjunction with a discharge or discharges from other sources, is a cause of a violation of any requirement of the POTW's NPDES permit (including an increase in the magnitude or duration of a violation), or which is a cause of a violation of State water quality standards.

pH—The pH of a liquid measures its acidity or alkalinity. A pH of 7 is defined as neutral, and large variations above or below this value are considered harmful to most aquatic life.

Potential Significant Industrial User--A potential significant industrial user is defined as an Industrial User which does not meet the criteria for a Significant Industrial User, but which discharges wastewater meeting one or more of the following criteria:

- a. Exceeds 0.5 % of treatment plant design capacity criteria and discharges <25,000 gallons per day or;
- b. Is a member of a group of similar industrial users which, taken together, have the potential to cause pass through or interference at the POTW (e.g. facilities which develop photographic film or paper, and car washes).

The Department may determine that a discharger initially classified as a potential significant industrial user should be managed as a significant industrial user.

Quantitation Level (QL)-- A calculated value five times the MDL (method detection level).

Significant Industrial User (SIU)--

- 1) All industrial users subject to Categorical Pretreatment Standards under 40 CFR 403.6 and 40 CFR Chapter I, Subchapter N and;
- 2) Any other industrial user that: discharges an average of 25,000 gallons per day or more of process wastewater to the POTW (excluding sanitary, noncontact cooling, and boiler blow-down wastewater); contributes a process wastestream that makes up 5 percent or more of the average dry weather hydraulic or organic capacity of the POTW treatment plant; or is designated as such by the Control Authority* on the basis that the industrial user has a reasonable potential for adversely affecting the POTW's operation or for violating any pretreatment standard or requirement (in accordance with 40 CFR 403.8(f)(6)).

Upon finding that the industrial user meeting the criteria in paragraph 2, above, has no reasonable potential for adversely affecting the POTW's operation or for violating any pretreatment standard or requirement, the Control Authority* may at any time, on its own initiative or in response to a petition received from an industrial user or POTW, and in accordance with 40 CFR 403.8(f)(6), determine that such industrial user is not a significant industrial user.

*The term "Control Authority" refers to the Washington State Department of Ecology in the case of non-delegated POTWs or to the POTW in the case of delegated POTWs.

Slug Discharge—Any discharge of a non-routine, episodic nature, including but not limited to an accidental spill or a non-customary batch discharge to the POTW. This may include any pollutant released at a flow rate which may cause interference with the POTW.

State Waters—Lakes, rivers, ponds, streams, inland waters, underground waters, salt waters, and all other surface waters and watercourses within the jurisdiction of the State of Washington.

Stormwater—That portion of precipitation that does not naturally percolate into the ground or evaporate, but flows via overland flow, interflow, pipes, and other features of a storm water drainage system into a defined surface water body, or a constructed infiltration facility.

Technology-based Effluent Limit—A permit limit that is based on the ability of a treatment method to reduce the pollutant.

Total Coliform Bacteria—A microbiological test which detects and enumerates the total coliform group of bacteria in water samples.

Total Dissolved Solids—That portion of total solids in water or wastewater that passes through a specific filter.

Total Suspended Solids (TSS)--Total suspended solids is the particulate material in an effluent. Large quantities of TSS discharged to a receiving water may result in solids accumulation. Apart

from any toxic effects attributable to substances leached out by water, suspended solids may kill fish, shellfish, and other aquatic organisms by causing abrasive injuries and by clogging the gills and respiratory passages of various aquatic fauna. Indirectly, suspended solids can screen out light and can promote and maintain the development of noxious conditions through oxygen depletion.

Water Quality-based Effluent Limit—A limit on the concentration of an effluent parameter that is intended to prevent the concentration of that parameter from exceeding its water quality criterion after it is discharged into a receiving water.

APPENDIX C--RESPONSE TO COMMENTS

No comments were received by the Department of Ecology.